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## **Citations**

- Source: BRFSS, CDC.
- Source: Mokdad A H, et al. *JAMA* 1999;282:16.
- Source: Mokdad A H, et al. *JAMA* 2001;286:10.
- Source: Mokdad A H, et al. *JAMA* 2003;289:1.
- Source: MMWR 2006;55:36.

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# Obesity Trends Among U.S. Adults between 1985 and 2004

#### **Definitions:**

- •Obesity: having a very high amount of body fat in relation to lean body mass, or Body Mass Index (BMI) of 30 or higher.
- •Body Mass Index (BMI): a measure of an adult's weight in relation to his or her height, specifically the adult's weight in kilograms divided by the square of his or her height in meters.

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#### Source of the data:

- •The data shown in these maps were collected through CDC's Behavioral Risk Factor Surveillance System (BRFSS). Each year, state health departments use standard procedures to collect data through a series of monthly telephone interviews with U.S. adults.
- •Prevalence estimates generated for the maps may vary slightly from those generated for the states by BRFSS (http://aps.nccd.cdc.gov/brfss) as slightly different analytic methods are used.

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During the past 20 years there has been a dramatic increase in obesity in the United States. In 1985' only a few states were participating in the CDC's Behavioral Risk Factor Surveillance System (BRFSS) and providing obesity data. In 1991, 4 states had obesity prevalence rates of 15–19 percent and no states had rates at or above 20 percent.

In 1995, obesity prevalence in each of the 50 states was less than 20 percent. In 2000, 28 states had obesity prevalence rates less than 20 percent.

In 2005, only 4 states had obesity prevalence rates less than 20 percent, while 17 states had prevalence rates equal to or greater than 25 percent, with 3 of those having prevalences equal to or greater than 30 percent (Louisiana, Mississippi, and West Virginia).

**Obesity Trends\* Among U.S. Adults; BRFSS, 1985** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alabama	Arizona	Georgia		
Alaska	California	Indiana		
Arkansas	Connecticut	Kentucky		
Colorado	Florida	North Dakota		
Delaware	Idaho	Ohio		
Hawaii	Illinois	South Carolina		
Iowa	Minnesota	West Virginia		
Kansas	Montana	Wisconsin		
Louisiana	New York			
Maine	North Carolina			
Maryland	Rhode Island			
Massachusetts	Tennessee			
Michigan	Utah			
Mississippi				
Missouri				
Nebraska				
Nevada				
New Hampshire				
New Jersey				
New Mexico				
Oklahoma				
Oregon				
Pennsylvania				
South Dakota				
Texas				
Vermont				
Virginia				
Washington				
Wyoming				

**Obesity Trends\* Among U.S. Adults; BRFSS, 1986** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska Arkansas Connecticut Colorado Delaware Hawaii Iowa Kansas Louisiana Maine Maryland Michigan	Alabama Arizona California Florida Georgia Hawaii Idaho Illinois Massachusetts Minnesota Missouri Montana	Indiana Kentucky North Carolina North Dakota South Carolina West Virginia Wisconsin		equal to 20%
Mississippi Missouri Nebraska Nevada New Hampshire New Jersey New Mexico Oklahoma Oregon Pennsylvania South Dakota	New Mexico New York Ohio Rhode Island Tennessee Utah			

**Obesity Trends\* Among U.S. Adults; BRFSS, 1987** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	Arizona	Alabama		
Arkansas	California	Georgia		
Colorado	Florida	Illinois		
Connecticut	Hawaii	Indiana		
Delaware	Idaho	Kentucky		
Iowa	Massachusetts	Maine		
Kansas	Minnesota	Maryland		
Louisiana	Montana	Missouri		
Michigan	Nebraska	North Carolina		
Mississippi	New Hampshire	North Dakota		
Nevada	New Mexico	Ohio		
New Jersey	New York	South Dakota		
Oklahoma	Rhode Island	Tennessee		
Oregon	South Carolina	Texas		
Pennsylvania	Utah	West Virginia		
Vermont	Washington	Wisconsin		
Virginia				
Wyoming				

**Obesity Trends\* Among U.S. Adults; BRFSS, 1988** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	Connecticut	Alabama		
Arkansas	Georgia	Arizona		
Colorado	Hawaii	California		
Delaware	Idaho	Florida		
Kansas	Minnesota	Illinois		
Louisiana	Montana	Indiana		
Mississippi	Nebraska	Iowa		
Nevada	New Hampshire	Kentucky		
New Jersey	New Mexico	Maine		
Oregon	New York	Maryland		
Pennsylvania	North Dakota	Massachusetts		
Vermont	Oklahoma	Michigan		
Virginia	Rhode Island	Missouri		
Wyoming	Tennessee	North Carolina		
	Texas	Ohio		
	Utah	South Carolina		
	Washington	South Dakota		
		West Virginia		
		Wisconsin		

Slide 10 of 26 **Obesity Trends\* Among U.S. Adults; BRFSS, 1989** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Alaska	Alabama	Illinois		
Arkansas	Arizona	Indiana		
Colorado	California	Iowa		
Delaware	Connecticut	Kentucky		
Kansas	Florida	Michigan		
Louisiana	Georgia	Minnesota		
Mississippi	Hawaii	Missouri		
Nevada	Idaho	Nebraska		
New Jersey	Maine	North Carolina		
Vermont	Maryland	North Dakota		
Wyoming	Massachusetts	Ohio		
	Montana	Oklahoma		
	New Hampshire	Oregon		
	New Mexico	Pennsylvania		
	New York	South Carolina		
	Rhode Island	Tennessee		
	South Dakota	Texas		
	Utah	Virginia		
		Washington		
		West Virginia		
		Wisconsin		

**Obesity Trends\* Among U.S. Adults; BRFSS, 1990** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	or 5'4" person)	15%-19%	Greater than or equal to 20%
Alaska	California	Alabama		
Arkansas	Colorado	Arizona		
Kansas	Massachusetts	Connecticut		
New Jersey	Minnesota	Delaware		
Nevada	Montana	Florida		
Wyoming	New Mexico	Georgia		
	New York	Hawaii		
	Utah	Idaho		
	Virginia	Illinois		
	Washington	Indiana		
		Iowa		
		Kentucky		
		Louisiana		
		Maine		
		Maryland		
		Michigan		
		Mississippi		
		Missouri		
		Nebraska		
		New Hampshir	re	
		North Carolina		
		North Dakota		
		Ohio		
		Oklahoma		
		Oregon		

Pennsylvania

Rhode Island

South Carolina

South Dakota

Tennessee

Texas

Vermont

Wisconsin

West Virginia

**Obesity Trends\* Among U.S. Adults; BRFSS, 1991** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	for 5'4" person) 10%-14%	15%-19%	Greater than or equal to 20%
Kansas	Colorado	Alabama	Louisiana	
Nevada	Georgia	Alaska	Michigan	
Wyoming	Massachusetts	Arizona	Mississippi	
	Montana	Arkansas	West Virginia	
	New Jersey	California		
	New Mexico	Connecticut		
	Rhode Island	Delaware		
	Utah	Florida		
	Washington	Hawaii		
		Illinois		
		Indiana		
		Iowa		
		Idaho		
		Kentucky		
		Maryland		
		Maine		
		Missouri		
		Minnesota		
		Nebraska		
		New Hampshire		
		New York		
		North Carolina		
		North Dakota		
		Oklahoma		
1		Ohio		

Oregon

Pennsylvania

South Carolina

South Dakota

Tennessee

Texas

Vermont

Virginia

Wisconsin

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1992** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
Arkansas	Arizona	Alabama	Kentucky	
Wyoming	Colorado	Alaska	Louisiana	
,, ; · · · · · · · · · · · · · · · · · ·	Hawaii	California	Michigan	
	New Jersey	Connecticut	Mississippi	
	Washington	Delaware	West Virginia	
		Florida	Wisconsin	
		Georgia		
		Idaho		
		Illinois		
		Indiana		
		Iowa		
		Kansas		
		Montana		
		Maine		
		Maryland		
		Massachusetts		
		Minnesota		
		Missouri		
		Nebraska		
		Nevada New Hampshire New Mexico		
		New York		
		North Carolina		

North Dakota

Ohio

Oklahoma

Oregon

Pennsylvania

Rhode Island

South Carolina

South Dakota

Tennessee

Texas

Utah

Vermont

Virginia

**Obesity Trends\* Among U.S. Adults; BRFSS, 1993** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	t for 5'4" person)	15%-19%	Greater than or equal to 20%
Wyoming	Massachusetts	Alabama	Arkansas	
, ,	New Jersey	Alaska	Indiana	
		Arizona	Kentucky	
		California	Louisiana	
		Colorado	Michigan	
		Connecticut	Mississippi	
		Delaware	North Carolina	
		Florida	Pennsylvania	
		Georgia	South Carolina	
		Hawaii	Tennessee	
		Idaho	West Virginia	
		Illinois	Wisconsin	
		Iowa		
		Kansas		
		Maryland		
		Maine		
		Minnesota		
		Missouri		
		Montana		
		Nebraska		
		Nevada New Hampshire		
		New Mexico New York		

North Dakota

Oklahoma

Ohio

Oregon

Rhode Island

South Dakota

Texas

Utah

Vermont

Virginia

Washington

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1994** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	for 5'4" person) 10%-14%	15%-19%	Greater than or equal to 20%
Rhode Island		Alaska	Alabama	
		Arizona	Arkansas	
		California	Illinois	
		Colorado	Indiana	
		Connecticut	Kentucky	
		Delaware	Louisiana	
		Florida	Michigan	
		Georgia	Mississippi	
		Hawaii	Missouri	
		Idaho	North Carolina	
		Iowa	Ohio	
		Kansas	Pennsylvania	
		Maine	South Carolina	
		Massachusetts	Texas	
		Maryland	West Virginia	
		Minnesota	Wisconsin	
		Montana		
		Nebraska		
		Nevada		
		New Jersey New Hampshire New York		
		New Mexico		
		North Dakota		
		Oklahoma		

Oregon

South Dakota

Tennessee

Utah

Vermont

Virginia

Washington

Wyoming

**Obesity Trends\* Among U.S. Adults; BRFSS, 1995** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Arizona	Alabama	
		California	Alaska	
		Colorado	Arkansas	
		Connecticut	Delaware	
		Georgia	Florida	
		Hawaii	Illinois	
		Idaho	Indiana	
		Maine	Iowa	
		Massachusetts	Kansas	
		Montana	Kentucky	
		Nevada	Louisiana	
		New Hampshire	Maryland	
		New Jersey	Michigan	
		New Mexico	Minnesota	
		New York	Mississippi	
		Oklahoma	Missouri	
		Oregon	North Carolina	
		Rhode Island	North Dakota	
		South Dakota	Nebraska	
		Utah	Ohio	
		Vermont	Pennsylvania	
		Washington	South Carolina	
		Wyoming	Tennessee	
			Texas	
			West Virginia	

Virginia	
Wisconsin	

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1996** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Arizona	Alabama	
		California	Alaska	
		Colorado	Arkansas	
		Connecticut	Delaware	
		Georgia	Florida	
		Hawaii	Idaho	
		Kansas	Illinois	
		Massachusetts	Indiana	
		Montana	Iowa	
		Minnesota	Kentucky	
		New Mexico	Louisiana	
		New Jersey	Maine	
		New Hampshire	Maryland	
		New York	Michigan	
		Rhode Island	Mississippi	
		South Dakota	Missouri	
		Utah	Nebraska	
		Vermont	Nevada	
		Washington	North Carolina	
		Wyoming	North Dakota	
			Oklahoma	
			Ohio	
			Oregon	
			Pennsylvania	
			South Carolina	

Texas
Tennessee
Virginia
West Virginia
Wisconsin

**Obesity Trends\* Among U.S. Adults; BRFSS, 1997** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	Greater than or equal to 20%
		Arizona	Alabama	Indiana
		Colorado	Alaska	Kentucky
		Connecticut	Arkansas	Mississippi
		Georgia	California	
		Kansas	Delaware	
		Massachusetts	Florida	
		Montana	Hawaii	
		Nevada	Idaho	
		New Hampshire	Illinois	
		New Mexico	Iowa	
		Oklahoma	Louisiana	
		Rhode Island	Maine	
		Utah	Maryland	
		Washington	Michigan	
		Wyoming	Minnesota	
			Missouri	
			Nebraska	
			New Jersey	
			New York	
			North Carolina	
			North Dakota	
			Ohio	
			Oregon	
			Pennsylvania	
			South Carolina	

South Dakota
Tennessee
Texas
Vermont
Virginia
West Virginia
Wisconsin

**Obesity Trends\* Among U.S. Adults; BRFSS, 1998** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	ight for 5'4" perso	15%-19%	Greater than or equal to 20%		
		Arizona	Arkansas	Alabama		
		Colorado	California	Alaska		
		Connecticut	Delaware	Louisiana		
		Massachusetts	Florida	Michigan		
		Montana	Georgia	Mississippi		
		Nevada	Hawaii	South Carolina		
		New Hampshire	Idaho	West Virginia		
		New Mexico	Illinois			
		Vermont	Indiana			
		Wyoming	Iowa			
			Kansas			
			Kentucky			
			Maine			
			Maryland			
			Minnesota			
			Missouri			
			Nebraska			
			New Jersey			
			New York			
			North Carolina			
			North Dakota			
			Oklahoma			
			Ohio			
			Oregon			
			Pennsylvania			

Rhode Island
South Dakota
Tennessee
Texas
Utah
Virginia
Washington
Wisconsin

Source: Mokdad AH, et al. *JAMA* 1999;282:16.

**Obesity Trends\* Among U.S. Adults; BRFSS, 1999** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data Less than 10%		15%-19%	Greater than or equal to 20%
	Arizona	Alaska	Alabama
	Colorado	California	Arkansas
	Connecticut	Delaware	Georgia
	Massachusetts	Florida	Illinois
	Montana	Hawaii	Iowa
	New Hampshire	Idaho	Kentucky
		Indiana	Louisiana
		Kansas	Michigan
		Maine	Mississippi
		Maryland	Missouri
		Minnesota	Nebraska
		New Jersey	North Carolina
		New Mexico	North Dakota
		New York	Oklahoma
		Nevada	South Carolina
		Ohio	Tennessee
		Oregon	Texas
		Pennsylvania	West Virginia
		Rhode Island	
		South Dakota	
		Utah	
		Vermont	
		Virginia	
		Washington	
		Wisconsin	

7	Wyoming

**Obesity Trends\* Among U.S. Adults; BRFSS, 2000** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data Less than 10% 10%-14%	15%-19%	Greater than or equal to 20%
Colorado	Arizona	Alabama
	California	Alaska
	Connecticut	Arkansas
	Delaware	Georgia
	Florida	Illinois
	Hawaii	Indiana
	Idaho	Iowa
	Maine	Kansas
	Maryland	Kentucky
	Massachusetts	Louisiana
	Minnesota	Michigan
	Montana	Mississippi
	Nevada	Missouri
	New Hampshire	Nebraska
	New Jersey	North Carolina
	New Mexico	Ohio
	New York	Oregon
	North Dakota	Pennsylvania
	Oklahoma	South Carolina
	Rhode Island	Tennessee
	South Dakota	Texas
	Utah	West Virginia
	Vermont	
	Virginia	
	Washington	

Wisconsin
Wyoming

Source: Mokdad A H, et al. *JAMA* 2001;286:10

**Obesity Trends\* Among U.S. Adults; BRFSS, 2001** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	t 30 lbs overweight for 5'4  Less than 10% 10%-14		20%-24%	Greater than 25%
Dutu	Colorado	o Arizona	Alabama	Mississippi
		Connecticut	Alaska	
		Florida	Arkansas	
		Hawaii	California	
		Maine	Delaware	
		Maryland	District of Columbia	
		Massachusetts	sGeorgia .	
		Minnesota	Idaho	
		Montana	Illinois	
		Nevada	Indiana	
		New Hampshire	Iowa	
		New Jersey	Kansas	
		New Mexico	Kentucky	
		New York	Louisiana	
		North Dakota	Michigan	
		Rhode Island	Missouri	
		Utah	Nebraska	
		Vermont	North Carolina	
		Washington	Ohio	
		Wyoming	Oklahoma	
			Oregon	
			Pennsylvania	
			South Carolina	
			South Dakota	
			Tennessee	

Texas
Virginia
West Virginia
Wisconsin

Source: Mokdad A H, et al. *JAMA* 2001;286:10

**Obesity Trends\* Among U.S. Adults; BRFSS, 2002** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data Less than 10%	10%-14%	15%-19%	20%-24%	Greater than or equal to 25%
		Arizona California Colorado Connecticut Florida Hawaii Idaho Maryland Massachusetts Montana New Hampshire New Jersey New Mexico Oregon Rhode Island Utah Vermont Wyoming	Louisiana  Maine  Maine  Michigan  Minnesota	Alabama Mississippi West Virginia
			Wisconsin	

Slide 24 of 26 **Obesity Trends\* Among U.S. Adults; BRFSS, 2003** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data Less than 10%	10%-14%	15%-19%	20%-24%	Greater than or equal to 25%
		Arizona Colorado Connecticut Florida Hawaii Maine Massachusetts Montana New Hampshire New Jersey New Mexico Rhode Island Utah Vermont Wyoming	Iowa Kansas Kentucky Louisiana	Alabama Indiana Mississippi West Virginia
			Wisconsin	

Slide 25 of 26 **Obesity Trends\* Among U.S. Adults; BRFSS, 2004** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data Less than 10%	10%-14%	15%-19%	20%-24%	Greater than or equal to 25%
Hawaii		Colorado	Alaska	Alabama
		Connecticut	Arizona	Arkansas
		Massachusetts	California	Kentucky
		Montana	Delaware	Louisiana
		Rhode Island	Florida	Michigan
		Utah	Georgia	Mississippi
		Vermont	Idaho	Tennessee
			Illinois	Texas
			Indiana	West Virginia
			Iowa	
			Kansas	
			Maine	
			Maryland	
			Minnesota	
			Missouri	
			Nebraska	
			Nevada	
			New Hampshire	
			New Jersey	
			New Mexico	
			New York	
			North Carolina	
			North Dakota	
			Ohio	
			Oklahoma	
			Oregon	
			Pennsylvania	
			South Carolina	
			South Dakota	
			Virginia	
			Washington	
			Wisconsin	

Wyoming				

**Obesity Trends\* Among U.S. Adults; BRFSS, 2005** (\*BMI greater than or equal to 30, or about 30 lbs overweight for 5'4" person)

No Data	Less than 10%	10%-14%	15%-19%	20%-24%	25%-29%	Greater than or equal to 30%
			Colorado	Arizona	Alabama	Louisiana
			Connecticut	California	Alaska	Mississippi
			Hawaii	Delaware	Arkansas	West Virginia
			Vermont	Florida	Georgia	
				Idaho	Indiana	
				Illinois	Kentucky	
				Iowa	Michigan	
				Kansas	Missouri	
				Maine	Nebraska	
				Maryland	North Carolina	
				Massachusetts	Oklahoma	
				Minnesota	South Carolina	
				Montana	Tennessee	
				Nevada	Texas	
				New Hampshire		
				New Jersey		
				New Mexico		
				New York		
				North Dakota		
				Ohio		
				Oregon		
				Pennsylvania		
				Rhode Island		
				South Dakota		
				Utah		
				Virginia		
				Washington		
				Wisconsin		
				Wyoming		

Source: MMWR 2006:55:36.